

to respond to permit requests within the forty-five days permitted by the Commission's access policies.¹⁵

Safe and efficient shared use of poles, ducts, conduits and rights-of-way requires coordination among the facility owner and the various attaching parties, and the Commission's rules should require compliance with reasonable application and pre-approval requirements. Utilities have a corresponding obligation to act responsively, however, and the Commission should require them to delegate permit review and makeready work to outside contractors or attaching entities when necessary to timely performance. The Commission should also authorize attaching entities to proceed at their own risk, using qualified contractors, when they encounter unreasonable delays in the processing of permit applications or the performance of makeready work.

D. Pure CATV Operators Should Be Required to Certify the Use of Their Facilities Under Oath and Require Utilities to Investigate and Correct Cases Involving the Payment of § 224(d) Rates by CATV Operators Providing Telecommunications Services.

¹⁵ The Commission should also be aware that the problem of unauthorized attachments is not solely attributable to the conduct of attaching parties. Many of the attachments identified by field surveys as unauthorized were in fact authorized by utility field personnel but not properly reported to the utility's central pole attachment administrator. Utilities often fail to coordinate such matters internally and sometimes actively encourage attaching parties to deal with the wrong department. In one case, a utility directed ICG to coordinate its pole attachment requests through the utility's telecommunications affiliate. Representatives of ICG and the affiliate identified vacant space on the utility's poles over a route desired by ICG, and the affiliate authorized ICG to commence installation of its facilities. After the route was completely constructed, the utility notified ICG that it was occupying space reserved for the incumbent LEC, asserted that its affiliate had no authority to permit ICG to use its poles, and demanded that ICG remove its facilities immediately. ICG eventually persuaded the utility to permit ICG to sublease the space from the incumbent LEC pursuant to the latter's § 224 obligations, but similar circumstances account for more than a few cases of allegedly unauthorized attachments.

Because pure CATV operators who do not provide telecommunications services will be entitled indefinitely to pay pole attachment and conduit lease rates determined in accordance with § 224(d), rather than the somewhat higher rates applicable under § 224(e), the Whitepaper Utilities seek to require pure CATV operators to certify, upon penalty of perjury, that their respective systems are used solely to provide traditional one-way video programming services to subscribers and are not used to provide telecommunications services. ICG strongly supports such a requirement. Because of the reluctance of many electric utilities to permit telecommunications carriers to use their poles and conduits at § 224(d) rates, there are a number of markets in which ICG competes with CATV operators who pay lower rates than those paid by ICG for the use of the same utility poles and conduits. It is not sufficient, however, for the Commission to rely upon the self-interest of utilities to police such rate disparities. It should further require utilities to investigate good faith claims by telecommunications carriers that CATV operators are providing telecommunications services while paying attachment fees below those charged to other telecommunications carriers and to take corrective action when such allegations are borne out.

E. The Commission Should Mandate the Development of a Uniform System for the Identification of Facilities Installed on and in Utility Poles, Ducts, Conduits and Rights-of-Way.

ICG supports the suggestion by the Whitepaper Utilities that the Commission require attaching parties to identify their attachments through a standardized, nationwide identification process. ICG believes that a negotiated rulemaking may be the most appropriate vehicle for adopting uniform identification standards. Pending the

development of national standards, however, the Commission should require utilities to make their own marking requirements more uniform. Many utilities, including at least two of the Whitepaper Utilities, currently require attaching parties to comply with different and sometimes inconsistent cable marking requirements in each utility operating district.

IV. The Commission Should Revise its Presumptions Concerning the Amount of Usable Space on a Pole.

In the NPRM, the Commission affirms its use of rebuttable presumptions it has previously adopted regarding the amount of usable and unusable space on a pole — **Average Pole Height: 37.5 feet; Average Amount of Usable Space: 13.5 feet; Average Amount of Unusable Space: 24 feet.** While the Commission recognizes the NESC requirement that a 40 inch safety space exist between electric lines and communications lines, it reiterates its longstanding position that the safety space should be assigned to the electric utility as part of its usable space. The Commission reaffirms its use of 18 feet as the lowest point of attachment for required ground clearance.

The Whitepaper Utilities encourage the Commission to continue to permit averages and assumptions, but they submit that the averages for usable and unusable space have changed as follows: **Average Pole Height: 40 feet; Average Amount of Usable Space: 11 feet** (electric occupying 7.5 feet, cable occupying 1 foot, and the incumbent LEC occupying 2.5 feet); **Average Amount of Unusable Space: 29 feet** (6 feet below ground, 19'8" of minimum ground clearance, 40 inches of safety clearance between electric and communications space). According to the Whitepaper Utilities, over time and in light of

the growing demand for access to poles by CATV operators and others, 35 foot poles have been replaced with 40 foot and taller poles to accommodate the demand for space.

The Whitepaper Utilities disagree with the Commission regarding the treatment of the 40 inch safety space, contending that it should be treated as unusable space, the costs of which would be shared by all parties with pole attachments. They argue that this clearance space is designed to protect employees of communications companies from encountering the fatal voltages carried by electrical lines and, as all parties benefit from it, the cost should be shared by all.

A. The Average Height of a Shared-Use Pole Is Most Likely 40 Feet.

ICG agrees with the Whitepaper Utilities that the Commission's presumption of an average pole height of 37.5 feet is most likely outdated. Since the late 1970s when that presumption was adopted and CATV operators were first assured of relatively low pole attachment rates, demand for pole space has increased dramatically. The AT&T divestiture and the development of facilities-based interexchange competition has led some interexchange carriers to install facilities on poles, and the development of facilities-based access competition beginning in the late 1980s added competitive access providers to the mix. In many areas, competitive LECs are now seeking to install their facilities on distribution poles as well. In some areas, poles may contain facilities of the electric utility, the incumbent LEC, two CATV operators, an IXC, a competitive access provider, and one or more competitive LECs, as well as traffic control and public alarm

systems. While perhaps not yet typical, the existence of such crowded poles strongly suggests that the Commission's twenty year old presumption is outdated.¹⁶

B. The Clearance Space Between the Electric Supply Space and the Communications Space Should Be Treated as Unusable Space.

ICG submits that the Whitepaper Utilities are also correct in advocating that the forty inch clearance between the communications space and the electric supply space on a pole should be treated as unusable space. The Commission's rationale for treating the so-called safety space as usable space that is used by the electric utility appears to be its belief that the NESC requires the electric utility to maintain this clearance between its facilities and those of communications users on the pole. In point of fact, however, the NESC simply requires the clearance; it does not impose the obligation to maintain the clearance upon any particular user of the pole. Indeed, the NESC expressly permits the installation of communications lines above the safety space as long as certain clearances

¹⁶ It is important to ensure, however, that utilities are not doubly compensated for their use of taller poles. In many cases, utilities have installed taller poles during new construction, or when replacing a pole or pole line for reasons other than an access request, in anticipation of future demand. Because such practices help reduce future makeready costs that may be borne by attaching CATV operators and telecommunications carriers, it is important that utilities' investment in taller poles in such cases be recognized in the Commission's rate methodology. On the other hand, utilities frequently install taller poles in order to make space available to particular parties who have requested access. In such cases, they almost uniformly charge the full cost of replacing the older pole, less the salvage value of the old pole, to the attaching party. Cf. Interconnection Order at ¶¶ 1211–1216 (authorizing such charges). It is critical that the costs of such poles not be included in the determination of a utility's average pole cost. In order to prevent any double recovery of such pole costs, the Commission should permit utilities to calculate pole attachment rates on the basis of an average pole height of forty feet (with the accompanying assumptions concerning the relative amounts of usable and unusable space) only if they certify that the costs of pole replacements charged to third parties are not included in their investment in poles and fixtures.

are maintained and the employees who install and maintain the lines are qualified to work in the electric supply space.

For years electric utilities argued that the safety space was required only because of the presence of communications attachments on their poles and that the cost of the safety space should be borne entirely by communications attachers. It is time for the Commission and the communications industries to recognize, as the electric utilities now do, that all parties benefit from the presence of the safety space and that they should share the associated cost by treating the space as unusable.

C. The Lowest Point of Attachment on a Shared-Use Pole Is Seventeen Feet, Eight Inches.

Whitepaper Utilities also argue that the lowest point of attachment should be 19' 8", rather than 18 feet, in order to allow for 18 feet of ground clearance after sag. They submit that to achieve a minimum ground clearance of 18 feet, a pole attachment cannot be made lower than 19'8" from the ground. The Whitepaper Utilities are clearly correct that the lowest point of attachment on a pole must be higher than the minimum ground clearance in order to maintain the proper clearance after allowing for sag, and their proposed average sag allowance of one foot, eight inches seems reasonable. They are incorrect, however, in contending that the required ground clearance is 18 feet. NESC Rule 232 (Table 232-1) requires a minimum ground clearance of 18 feet if the lowest line on a pole is an electrical conductor. If the lowest line is a communications line, however, Rule 232 specifies minimum ground clearances of 16 feet or less except for crossings over railroad tracks and water areas suitable for sailboating. Using the Whitepaper Utilities'

proposed sag allowance, the lowest point of attachment is generally 17' 8", and lower in many cases.

D. The Commission Should Presume that Poles Average Thirteen Feet of Usable Space.

ICG submits that the Commission's rules should recognize that the average distribution pole today is most likely 40 feet long, that the 40 inch separation between the electric supply space and the communications space benefits all parties and should be treated as unusable space, and that it is necessary to allow for sag when determining the lowest point of attachment to poles, but that only 16 feet, and not 18 feet, of ground clearance is required when the lowest line on a pole is a communications line rather than an electric power line. Accordingly, the rate formula should be based upon a 40 foot pole with 27 feet of unusable space¹⁷ and 13 feet of usable space.

V. Allocation of Cost of Unusable Space

A. Each Attaching Entity Should Be Treated as One Attaching Entity, Regardless of the Number of Attachments or the Amount of Space Occupied.

Section 224(e)(2) provides that "[a] utility shall apportion the cost of providing space on a pole, duct, conduit or right-of-way other than the usable space among entities so that such apportionment equals two-thirds of the costs of providing space other than usable space that would be allocated to such entity under an equal apportionment of such costs among all attaching entities." Consistent with this statutory language, the Commission proposes requiring equal apportionment of two-thirds of the costs of providing unusable space among all attaching entities, that any telecommunications carrier, or CATV

¹⁷ Six feet buried + 17'8" for ground clearance + 40" safety space.

operator or LEC attaching to a pole, including incumbent LECs, be counted as a separate entity for the apportionment, and that such costs be apportioned equally to all such attaching entities. The Commission also seeks comment on an approach that would count any telecommunications carrier as a separate attaching entity for each foot, or partial increment of a foot, it occupies on the pole and on such a methodology's consistency with the statutory requirement for equal apportionment among all attaching entities.

Each user of a pole or conduit should be counted as one entity for purposes of allocating the cost of unusable space, regardless of how many attachments it makes or the amount of space that it occupies. The Commission's proposal to count a telecommunications carrier, or any other attaching entity, as more than one attaching entity if it occupies more than a standard space allocation, if applied consistently to all users, would effectively apportion the cost of unusable space on the basis of parties' relative use of usable space and would be fundamentally no different from the allocation methodology under § 224(d). Congress clearly intended a different approach under § 224(e) and expected that rates established pursuant to § 224(e) would be somewhat higher than those prevailing under § 224(d). ICG submits that the rationale behind § 224(e)(2) is that all attaching parties benefit equally from the unusable space on a pole or in a conduit, rather than in proportion to the amount of space that they occupy. Only an equal allocation of unusable space costs to each attaching party is consistent with the Congressional mandate.

B. Attachments by Government Entities Should Be Disregarded in Allocating the Cost of Unusable Space.

The Commission proposes that attachments made by a government agency be included in usable space and the determination of the average number of users per pole. It proposes that these costs should be borne by pole owner since it relates to a responsibility under its franchise or statutory authorization. The Whitepaper Utilities argue that attachments made by governmental agencies should not be included in the calculation of usable space and the average number of users per pole because it would unfairly reduce the percentage of costs recovered by the utility for the unusable space. They submit that Congress intended that utilities be permitted to recoup the costs of unusable space.

The issue of whether attachments made by a government agency should be deemed to occupy usable or unusable space or considered in the determination of the average number of users per pole or duct may not be as significant as it initially appears. Although most franchising authorities and statutes require that pole and duct space be made available for government use without charge, and some space is in fact used for such governmental purposes as traffic control systems, street lights and fire alarm boxes, the majority of poles and ducts in most areas do not bear governmental attachments.¹⁸

The Whitepaper Utilities are correct, however, in urging that space occupied by governmental attachments should be considered unusable space and that government entities should not be counted in the determination of the average number of users per pole or duct. The fact that the pole or conduit owner, rather than other users, is obligated

¹⁸ In fact, the Whitepaper Utilities' description of how space on a pole is allocated does not allow any space for use by government entities.

to provide the free space is irrelevant. The cost of providing free space for government use is part of the cost of having the pole or conduit in the public right-of-way, a cost that should be shared by all users by treating the space as unusable and not counting the government user when allocating the cost of unusable space. On the other hand, where a governmental body is itself an electric utility or telecommunications carrier, it should be treated like any other user of the pole and charged an appropriate, nondiscriminatory pole attachment fee.

Moreover, in the case of poles, it is often the case that governmental attachments either occupy space that is not otherwise usable or are installed so as to avoid interfering with other parties' use of usable space. Traffic control communications lines may occupy space that would otherwise be usable for communications attachments, but street lights often are either installed in the safety space or installed in the electric supply space or communications space in ways that do not interfere with the placement of cables at essentially the same height, and alarm boxes and traffic control boxes are installed much lower than any cable could be. In sum, both fairness in the allocation of pole and conduit costs and actual field practices support treating the space, if any, occupied by governmental attachments as unusable space and disregarding government entities when determining the number of attaching entities on a pole.

C. The Commission Should Utilize Existing Field Surveys to Determine the Average Number of Attaching Entities per Pole.

The Commission proposes that each utility develop, through the information it possesses, a presumptive average number of attachers on one of its poles and asks whether it should establish any specific parameters for such determinations. The

Commission also seeks comment on whether a utility should develop averages for areas that share similar characteristics relating to pole attachments and whether different presumptions should exist for urban, suburban, and rural areas. Alternatively, the Commission seeks comment on whether it should determine the average number of attachments; whether it should initiate a survey to gain the data and the difficulties of administering such a survey; and, if this method is adopted, how it can be challenged. The Whitepaper Utilities recommend the use of currently available, accurate information to calculate the average number of parties with pole attachments per pole and recommend that a calculation be performed to yield the average number of parties per pole over a utility's distribution system.

Although opinions differ concerning the amount of usable space on an average shared use pole, all agree that the majority of the space on typical poles is unusable space. Accordingly, the number of parties among whom unusable space cost is allocated is a significant factor in determining pole attachment rates under § 224(e). The Whitepaper Utilities, however, correctly note that the transactional costs of setting pole attachment rates on a pole-by-pole basis depending upon the number of parties on each pole would be prohibitive. In order to provide guidance concerning the appropriate level of pole attachment rates, the Commission should determine and periodically update an average number of attaching parties per pole for urban, suburban, and rural areas, and possibly for different regions of the country. By introducing minor refinements to existing practices, the Commission should be able to administer such a survey at minimal expense.

Virtually all pole attachment agreements provide for periodic field surveys, generally once every three to seven years, to determine which entities have attached what facilities to whose poles. Most such surveys are performed jointly by the pole owner and most or all attaching entities, with or without the use of an outside contractor. Some utilities attempt to count the attachments on each and every pole in the area surveyed. Others count attachments on a sample of poles, often using sampling techniques developed with the assistance of statistical experts. The results of such surveys are used to update and correct outside plant records, reconcile differing records concerning the location of pole attachments, resolve billing disputes, assess charges for unauthorized attachments, and for numerous other purposes related to the administration of pole attachment agreements. Although survey methodologies currently in use vary considerably, they all share one critical characteristic: the parties who conduct the surveys consider their results sufficiently reliable to govern the details of their business relationships.

The Commission should, through a supplemental proceeding, require the submission of certain limited information from the field surveys that are already performed as part of pole attachment relationships. The only information the Commission should require would be the average number of attaching entities per pole, an indication of the region of the country and whether the area surveyed is urban, suburban, or rural in character. The Commission should not require parties who do not, for whatever reason, perform pole attachment field surveys to do so, or require those who do to modify their methodologies in order to provide the precise information the Commission requires. Either party to a pole attachment relationship should be permitted, however, to insist

upon a field survey meeting minimal criteria set by the Commission at least once every five years or so.

Survey results could be submitted to the Commission on diskette in a standard spreadsheet or database format, thus minimizing both reporting and input costs. Periodically, the Commission could publish an updated average.¹⁹ The average number of attaching entities per pole so developed would provide general guidance to parties negotiating pole attachment rates and could be used as a presumption in a pole attachment rate complaint. Either party should be permitted to rebut the presumption using either the results of a field survey performed pursuant to a pole attachment agreement between them or a statistically valid survey of the specific poles in issue.²⁰

Individually, many utilities have insufficient experience with multiple communications attachments to their poles to be able fairly to estimate the average number of attaching parties on their poles.²¹ Collectively, however, they possess sufficient information to permit the Commission to do so without unduly burdening pole owners or users or the Commission's own resources. By collating the available

¹⁹ With careful selection of the reporting format and the software used to compile the average, it might be feasible inexpensively to post a continuously updated average on the Commission's World Wide Web site.

²⁰ Rule 363 of the Commission's rules of procedure, 47 C.F.R. § 1.363, should apply to surveys performed by one party to a pole attachment rate complaint, but not to surveys performed in accordance with a methodology agreed upon by the parties.

²¹ For example, the Whitepaper Utilities' description of the typical allocation of usable space on a forty foot pole leaves room for only one communications attachment other than those of the incumbent LEC, although there are many forty foot poles with three or more communications attachers.

information, the Commission can provide important guidance concerning reasonable pole attachment rates without unduly burdening utilities or attaching parties or interfering with private negotiations directed to specific circumstances.

VI. Allocation of Usable Space

A. The Commission Should Recognize that Generally Accepted Engineering Standards Support an Allocation of Only Six Inches of Usable Space for Most Communications Attachments in the Communications Space and Sixteen Inches of Usable Space for Communications Attachments in the Electric Supply Space.

In the NPRM, the Commission proposes to retain its long-standing presumption that each communications attachment to a pole occupies one foot of usable space but requests comments on whether it should change this presumption. The Whitepaper Utilities did not directly address this issue, implicitly assuming that each attaching communications entity other than the incumbent LEC occupies one foot of usable space. Based upon the most widely accepted engineering standard, the Commission's one foot presumption is outdated, if it was ever valid, and should be abandoned. Most communications attachments should only be allocated six inches of usable pole space, although communications attachments above the safety space should be allocated sixteen inches of usable space, and overlashed cable combinations below the safety space should be allocated nine inches of usable space.

The Commission's one foot presumption was originally derived from Congressional assumptions concerning the clearances required between communications lines and practices of many utilities requiring one foot of separation between communications lines owned by different entities. It is not clear whether Congress's assumptions were valid in the mid-1970s when the original Pole Attachment Act was being debated. Nevertheless,

it is clear that they are not valid today. Rules 230–239 of the NESC specify the clearances required between electric power and communications cables and other cables, structures, and objects. In general, these rules do not specify minimum vertical clearances between parallel communications lines attached to the same poles or other structures, and they specifically recognize that two communications cables may be attached to the same attaching point on a pole. Where the NESC does specify clearances between communications lines and other cables and lines attached to poles (other than electric power lines), clearances greater than six inches are never required, and clearances of three inches are the norm. The NESC does not distinguish between cables used by CATV operators and those used by telecommunications carriers or among different types of communications lines.

In the Interconnection Order, the Commission properly determined that telecommunications carriers' requests for access to utility poles, ducts, conduits and rights-of-way should be governed by widely accepted engineering standards and governmentally-required standards and not by the preferences of particular utilities. The same should be true of the rates for pole attachments. The Commission's rules should recognize that the most widely accepted engineering standard for the safe installation of electric and communications lines on poles supports an allocation of six inches, not one foot, of usable space for simple communications attachments below the safety space. If one cable is overlashed with another, thus creating a larger bundle that may need more clearance, a nine inch allocation is appropriate. A utility generally should be permitted to charge a telecommunications carrier for a foot of usable space only upon the agreement

of the carrier or by establishing that an applicable governmental requirement dictates a one foot clearance between communications lines. Although allocation of only six inches of usable space to each communications attachment below the safety space results in a somewhat reduced pole attachment rate, it permits the attachment of more communications facilities to each pole, ultimately increasing the total pole attachment revenue potential per pole, and in many cases will result in reduced makeready work because a new attachment can more often be placed between two existing attachments without the need for rearrangement.

There is one situation, however, where communications attachments should be allocated more than one foot of usable space. The NESC generally divides the space on a pole between an electric supply space at the top of the pole and a communications space lower down, separated by a forty inch clearance often referred to as the “safety space.”²² Since at least the 1990 Edition, however, the NESC has permitted the installation of communications lines, especially fiber optic cables, in the electric supply space. Installation of communications lines in the electric supply space requires that the lines be treated as electric supply neutrals for purposes of determining most clearances and requires the use of employees qualified to work in the electric supply space, but often yields dramatic savings on makeready costs because of available space. NESC Rule 235C (Table 235–5) requires a clearance of sixteen inches between a communications line located in the electric supply space and any electric supply conductor.

²² The NESC itself does not use the term “safety space.”

Until well into the 1990s, the BOCs objected to parties other than electric utilities owning or installing communications lines in the electric supply space. They eventually agreed, however, that the relevant issue is one of the use of qualified personnel and the maintenance of adequate clearances, not the ownership of the cable, and this was clarified in the 1993 Edition of the NESC. Many electric utilities initially resisted the placement of communications lines in the electric supply space, but most are now amenable because of the reduced makeready effort. Quite a few electric utilities, however, continue to seek to discriminate with respect to communications access to the electric supply space, reserving it for their own telecommunications operations or for use by a favored few telecommunications carriers. The Commission should clarify that utilities are obligated to provide nondiscriminatory access for the attachment of telecommunications carriers' facilities in the electric supply space on poles, to the extent permitted by the NESC or other applicable safety codes, as well as in the communications space.

A telecommunications carrier seeking to install facilities in the electric supply space should be required to obtain engineering approval from the electric utility, whether or not it is the owner of the pole, as well as from the pole owner if it is not the electric utility. Utilities should be permitted to charge somewhat higher pole attachment rates, based upon an allocation of sixteen inches of usable space, for attachments in the electric supply space. If the electric utility is not the owner of a pole, the electric utility and the pole owner should be permitted to agree between themselves on the division of the pole attachment fee. In the absence of agreement, the attaching telecommunications carrier

should pay the portion of the pole attachment fee representing the allocation of unusable space to the pole owner and the portion representing the allocation of usable space to the electric utility.²³ Unless otherwise agreed, the pole owner's costs should be used to determine both portions of the fee, as they generally provide the basis for the electric utility's payment to the pole owner.

The Commission's rate regulations, as well as its access policies, should be based upon the most up-to-date, generally applicable engineering standards. The Commission should move from a uniform and outdated presumption that communications attachments occupy one foot of usable space to a recognition that most communications attachments in the communications space on poles require only six inches of usable space, while overlashed facilities occupy a somewhat larger space and communications attachments in the electric supply space require sixteen inches of usable space in order to maintain required clearances. Although such an approach is slightly more complex than a simple uniform presumption, it promotes economically efficient use of pole space and cost-causative pole attachment rates. Utilities should be permitted to seek different usable space allocations in pole attachment negotiations, but not to mandate them in the absence of an applicable safety requirement or a demonstration that a particular attaching party's facilities occupy more usable space, either in general or in specific instances.²⁴

²³ This mirrors ICG's proposed treatment, discussed elsewhere in these Comments, of the subleasing of space assigned to incumbent LECs on poles owned by electric utilities.

²⁴ Some wireless facilities, in particular, may have significantly different clearance and space requirements from those of communications cables, and may be appropriate for case-by-case determination of the usable space allocation.

Through such policies, the Commission can promote economically efficient shared use of poles without compromising safety requirements or overriding privately negotiated agreements.

B. The Commission Should Permit Telecommunications Carriers to Sublease Space Reserved for Incumbent LECs on Electric Utility Poles.

The Commission correctly proposes to count an incumbent LEC as an attaching entity when apportioning the cost of unusable space. The Commission has failed, however, to address the treatment of the allocation of usable space to incumbent LECs. Although the Commission does not have jurisdiction over the pole attachment rates charged to incumbent LECs, it must consider the effect of space allocations to incumbent LECs on the rates, terms, and conditions for attachments by other telecommunications carriers and the interrelationship between those allocations and incumbent LECs' own obligations under § 224.

Many joint use agreements between electric utilities and incumbent LECs allocate two and one-half feet of usable space to the incumbent LEC, which is the basis for the Whitepaper Utilities' description of an allocation of eleven feet of usable space as seven and one-half feet for the electric utility, two and one-half feet for the incumbent LEC, and one foot for another communications user. Arguments by electric utilities that they should be permitted to charge "market-based" rates for pole attachments by new telecommunications carriers are actually arguments that they should be permitted to charge new entrants as much for the use of one foot of pole space as they charge incumbent LECs for the reservation of two and one-half times as much space.

In its comments in CS Docket No. 97-98, the United States Telephone Association correctly noted that incumbent LECs generally do not use two and one-half feet of pole space, but that their use of usable space is generally about the same as that of any other communications user of a pole. Many electric utilities are more protective of the space allocated to the incumbent LEC, refusing to permit any other party to use it, than are the incumbent LECs themselves. The result is that, as a practical matter, space is often reserved on electric utility poles for unidentified future use by the incumbent LEC, but not for other parties, in violation of the policies enunciated in the Interconnection Order.

At least in cases where there is insufficient unreserved space available to permit attachments by another party without the need for extensive makeready work, a telecommunications carrier should be permitted to attach its facilities to available space within the incumbent LEC's reserved space. Incumbent LECs, like electric utilities, are obligated by § 224 to provide other telecommunications carriers nondiscriminatory access to space on and within poles, ducts, conduits and rights-of-way that they own or control. If an agreement between an electric utility and an incumbent LEC precludes the electric utility from allowing a telecommunications carrier to attach to space on one of its poles because the space has been reserved for the incumbent LEC, then to that extent the incumbent LEC controls access to the pole, and it must make the space available to other carriers pursuant to its own § 224 obligations.

The attaching party in such a case should have a pole attachment agreement with both the electric utility and the incumbent LEC, and its attachments should generally be governed by the agreement with the electric utility, except for the payment of rentals.

Because the incumbent LEC generally pays the electric utility for the reserved space, the attaching party should pay rent, or at least the portion of the pole attachment fee representing its allocation of the cost of usable space, to the incumbent LEC rather than to the electric utility. The attaching party should be required to deal with only one party for pre-attachment permitting and related issues, however, and the electric utility and incumbent LEC should be permitted to decide which one will take responsibility for such matters.

VII. Safety Concerns Do Not Justify Denial of Access to Electric Utility Ducts, Conduits and Transmission Facilities.

The Whitepaper Utilities contend that electric utilities have received few demands for access to their ducts, conduits, rights-of-way or transmission facilities. To the extent that electric utilities in fact have received few demands for access to their ducts and conduits, this is mostly because of differences between the locations where conduits and poles are predominant and because of the fact that until relatively recently, most access demands have come from CATV operators. Because of the nature of their core services, CATV operators have been primarily interested in residential areas, which are predominantly served using facilities installed on poles or by direct burial. Demand for access to central business districts and office and industrial parks that are served predominantly with facilities installed in conduits is relatively recent. Also, in almost all states, telecommunications carriers who are not affiliated with CATV operators had no legal right to demand access to electric utility poles, ducts, conduits and rights-of-way prior to the Telecommunications Act amendments to § 224. Electric utilities thus were free to rebuff their requests for conduit access, with the result that many carriers did not

ask. Finally, most BOC rates for the use of ducts are well below those demanded by many electric utilities, so many carriers go to the BOCs for conduit access, rather than to the electric utility. Access to conduit space is becoming critically important for new LECs seeking to serve customers in concentrated business districts and high density multi-family residential areas.

The Whitepaper Utilities also contend that access to their ducts, conduits and transmission facilities presents heightened safety concerns far beyond those raised by access to their poles and that most requests for access to such electric facilities have been denied on grounds of safety. In ICG's experience, such safety concerns are generally overstated and are often used by utilities as a basis for access discrimination. Most electric utilities place their own telecommunications lines in conduit or on transmission facilities whenever possible because of lesser exposure to traffic, construction and similar hazards as compared to distribution poles or direct burial. Many permit CATV operators and telecommunications carriers to do so on a selective basis. The Commission needs to make it clear that electric utilities cannot deny access to ducts, conduits and transmission facilities on grounds of safety when such concerns can be adequately addressed in other ways.

In general, the safety concerns associated with the installation and maintenance of telecommunications facilities in electric utility ducts and conduits relate to the training and experience of the personnel performing the work and to the equipment they use. Telecommunications field personnel often are not qualified or properly equipped to work in close proximity to energized electric facilities, which is the reason for the forty inch

safety space that separates electric facilities and most communications facilities on poles. In most cases, however, this issue can be addressed by a requirement that the attaching telecommunications carrier employ contractors approved by the electric utility. In extreme cases, electric utilities should be permitted to insist that work in specific conduits be supervised or even performed only by the utility's own personnel. A utility seeking to deny access altogether on grounds of safety, whether to its conduit system generally or to specific ducts, should be required to demonstrate that the use of qualified and appropriately equipped personnel will not mitigate the relevant safety concerns.

The installation of telecommunications facilities on and in above-ground electric transmission facilities and rights-of-way does not present the kinds of safety concerns raised by installation in ducts and conduits. Underground installation of telecommunications lines in transmission rights-of-way, whether by direct burial or in existing or newly constructed conduits, raises no unique safety issues as compared to underground installation in other locations. Electric utilities have permitted both LECs and IXC's to install underground fiber optic facilities in their transmission rights-of-way for many years and must not be allowed to use safety considerations as an excuse to deny new entrants comparable access. Similarly, the attachment of telecommunications facilities to transmission poles and towers at grade clearance levels is fundamentally no different from attachment to distribution poles,²⁵ and utilities should not be permitted

²⁵ Such installations may in fact be safer in many cases than installation on distribution poles because of greater clearances between the electric and telecommunications facilities.

to impose unjustified limitations on such attachment of telecommunications facilities to transmission facilities.

A third method of installing telecommunications lines on electric transmission facilities does, however, present unique issues that may warrant a different regulatory approach. During the 1970s, the electric utility industry pioneered the installation of fiber optic cable within the static wire on electric transmission facilities. In the late 1980s, they began installing such facilities in cooperation with telecommunications carriers, a phenomenon the Commission first noted in its 1989 Fiber Optic Deployment Report. Such installation actually makes the cable containing the optical fibers a part of the electric transmission line. Not only does this raise significant safety issues because of the high voltages involved, but telecommunications installation and maintenance activities must be closely coordinated with electric utility operations in order to avoid adverse impacts on electric system safety and reliability. Because of these considerations, the Commission may wish to reserve judgment concerning the applicability of § 224 to such arrangements.

VIII. The Commission Must Develop a Methodology for Determining Reasonable Rates for the Use of Ducts and Conduits.

The Whitepaper Utilities also urge the Commission to take a deregulatory approach regarding access to electric utility ducts, conduits and transmission facilities, resolving these issues, presumably including the issue of appropriate rates, only on a case-by-case basis. Again, however, the Whitepaper Utilities overstate their case. Although the Commission should rely primarily on private negotiations to establish rates, terms, and conditions for the installation of telecommunications carriers' facilities in utilities' ducts

and conduits, guidance from the Commission is needed concerning reasonable rate levels for such arrangements. Because of the time required to pursue an access or rate complaint and the difficulty of predicting the outcome in the absence of an established rate formula or methodology, a hands-off, case-by-case approach encourages utilities to engage in price-gouging and discrimination. Rates for the use of space in utility ducts and conduits vary dramatically, far more than can be explained by differences in cost or demand, so much so that some rates can be explained only as abuses of utilities' superior bargaining positions. Guidance from the Commission concerning the reasonableness of such rates is critical to the development of local exchange competition.

Incumbent LECs have powerful incentives to overcharge new telecommunications entrants for the use of their ducts and conduits, yet their rates are often far below those demanded by electric utilities. Rates for the use of LEC ducts and conduits that are based upon the formula in § 224(d) generally fall in the range of \$1.00 or less per year for each linear foot of occupied duct space.²⁶ Where LEC conduit rates have been essentially unconstrained by regulation, they generally do not exceed about \$7.00 to \$8.00 per foot per year except in special cases.²⁷ Given incumbent LECs' incentives to overcharge their

²⁶ For example, ICG's pole attachment and conduit lease agreement with BellSouth Telecommunications, Inc. provides for a conduit rate of \$0.70 per foot per year in Kentucky, and its agreement with Southwestern Bell Telephone Company specifies a conduit rate of \$0.62 per foot per year in Texas. BellSouth has proposed § 224-based rates of \$0.56 per foot per year in its Statements of Generally Available Terms and Conditions in South Carolina and Georgia and has calculated what it asserts is a forward-looking economic cost-based rate of \$0.71 per foot per year for the use of its conduits in Georgia.

²⁷ For example, BellSouth charges \$17.13 per foot per year for the use of a specific conduit crossing a navigable waterway in Miami.